

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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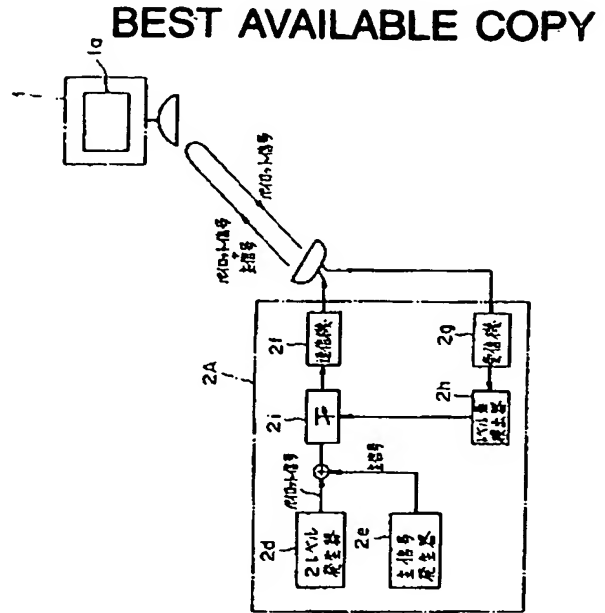
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APPLICANT : NIPPON TELEGR & TELEPH CORP  
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TITLE : TRANSMISSION POWER CONTROL  
SYSTEM IN SATELLITE  
COMMUNICATION



**ABSTRACT :** PURPOSE: To improve the control with simple constitution by measuring directly the input/output characteristic of a satellite repeater.

CONSTITUTION: Two pilot signals having a prescribed level difference from the 2-level generator 2d of an earth station 2A are added to a main signal and the resulting signal is fed to the repeater 1a of an artificial satellite 1. A level difference between the two pilot signals is varied with the input/output characteristic of the repeater 1a. The characteristic change is used to detect the level difference of the pilot signals returned from the repeater 1a by a detector 2h, thereby obtaining the input/output operating point of the repeater 1a directly. Then the detected reception difference is used as the control reference of transmission power of the earth station 2A and the transmission power of the earth station 2A is controlled by a variable attenuator 2i so that the reception level difference is always constant, thereby making the output power from the repeater 1a constant at all times.

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